International Civil Aviation Organization

MIDANPIRG/21 & RASG-MID/11 Meetings

(Abu Dhabi, UAE, 4 – 8 March 2024)

Agenda Item 5.3:   **ANS (AIM, PBN, AGA-AOP, ATM-SAR, CNS and MET**

UPDATING OF THE GLOBAL AIR NAVIGATION PLAN (GANP)
DEVELOPMENT OF NATIONAL AIR NAVIGATION PLANS (NANP)

(Presented by Saudi Arabia)

SUMMARY
As defined under the GANP, the fourth level, under responsibility of the States, focuses on national planning. The development of the national air navigation plan, in coordination with relevant stakeholders, is a strategic part of the State aviation development plans and its alignment with regional and global plans is crucial to achieve the common vision being developed in the GANP. The national air navigation plan should serve as reference and master document for the planning and development of air navigation services, deployment of operational improvements, upgrading of infrastructure and facilities and setting of roadmaps for the evolution of air navigation system.
This paper to encourage MID region to develop guidance material on the development of National Air Navigation Plan (NANP) for ANS modernization. It also defines a proposal for the contents of NANP that may be considered in the drafting of regional proposal to be presented during the ICAO 14th Air Navigation Conference planned form 26 August 2024 - 6 September 2024.
Action by the meeting is under paragraph 4 of this IP.

Reference(s)	- A41-6: ICAO global planning for safety and air navigation - MIDANPIRG CONCLUSION 20/9: DEVELOPMENT OF NANP. - MIDANPIRG DECISION 20/12: RANP/NANP TASK FORCE. - Doc 9750, Global Air Navigation Plan, 7th Edition. - ICAO MID Region Air Navigation Strategy - Doc 002. - The WP/12 submitted in the first meeting RANP/NANP TF/1 in Cairo, Egypt, 19 - 22 February 2024 .

1.   INTRODUCTION

1.1   As defined under the GANP, the fourth layer is under the responsibility of each State and should focus on national planning and implementation. The development of the National Air Navigation Plan (NANP) should be conducted in coordination with stakeholders with a formal process to gather inputs from all affected users, providers, and operators. It is also considered as a strategic part of a MID State aviation development plans and its alignment with MID Region ANP and ICAO global plans for air navigation (GANP), safety (GASP), and security (GASeP) is crucial to achieve the main objectives of regional and global harmonization.

1.2   The NANP serves as reference and master document for the planning and development of air navigation services, deployment of operational improvements, upgrading of infrastructure and facilities and setting of roadmaps for the evolution of air navigation systems and services.

1.3   To support Contracting States in the development of NANPs, ICAO recommends use of the Performance Based Approach (PBA) and the six-step of the performance management process described in the Manual on Global Performance of the Air Navigation System (Doc 9883). At regional level, the MIDANPIRG/20 meeting adopted conclusion i.e., MIDANPIRG CONCLUSION 20/9 on the development of NANP where the PBA is adopted as main framework for the development of ANS modernization plans.

1.4   The MIDANPIRG has also adopted a decision establishing RANP/NANP Task force (TF) to ensure regional harmonization and to provide guidance to MID States in the development, assessment, and maintenance of their NANPs.

2.   DISCUSSION

2.1.   MID RANP/NANP Task force (TF)

2.1.1   The MID RANP/NANP Task force (TF) held its first meeting from 19 to 22 February 2024. The TF adopted the terms of reference (ToRs) that were attached to the report of the meeting. However, the terms have not clearly and explicitly indicated that the TF will develop guidance material as means to support States in the development of NANPs as specified in MIDANPIRG CONCLUSION 20/9.

2.1.2   The main activities of the TF can be summarized as follows:

- sharing of experience between participating States on the development and maintenance of their NANPs;
- sharing of experience on the implementation of operational improvements using ICAO PBA;
- monitoring the progress and status of level 1 ASBU threads and elements adopted at regional level;
- review of proposal for the updates to MID Air Navigation Strategy and MID eANP Volume III.

2.1.3   Although, the lessons learned and experience gained by ICAO MID States in the development of NANPs and deployment of operational improvements are valuable source of information to identify the best fit solutions for planning and implementation of ASBU threads and elements, there is a need to develop regional material considering all inputs and to define concrete and easy step-by-step methodology that can support MID States in the development, assessment, and maintenance of their NANPs for ANS modernization considering all flight phases (gate to gate operations).

2.2.   Proposal for NANP Contents

2.2.1   Under the GANP updates and considering the Assembly Resolution A41-6: ICAO global planning for safety and air navigation, it is expected that ICAO will develop a common and standardized template for the structure of the NANP as one of the essential guidance materials to harmonize the contents of this plan and to support Contracting States in advancing the development, assessment, and maintenance of their NANPs.

2.2.2   The ICAO 14th Air Navigation Conference planned form 26 August 2024 - 6 September 2024, will provide an opportunity for detailed technical discussions which are expected to lead to agreement on a set of high-level recommendations in the field of air navigation and safety. The provisional agenda item 3 of this conference will discuss the technical update of the eighth edition of the Global Air Navigation Plan (GANP) which may include setting of high-level structure for the NANP and its contents.

2.2.3   The ICAO 14th Air Navigation Conference will be also an opportunity for MID region to share its expectations for the NANP and to present a high-level contents for the plan that can be considered in the development of ICAO global guidance material. This will support the activities of MID RANP/NANP Task force and allow the development of regional guidance considering the experience gained in ANS transformation and modernization.

2.2.4   The contents of the NANP may be divided into six parts as shown in Attachment to this IP with a preference to be managed through a specific portal or web-based platform. (check the attachment)

3.   CONCLUSION

3.1   The development of NANP requires leadership (Robust Governance), close engagement of stakeholders, and resources. It should be aligned with GANP, MID ANP, and MID-Air Navigation Strategy. To effectively support MID States in developing their NANPs, the RANP/NANP Task force should define practical guidance, and typical use cases based on the experience gained by MID States in the deployment of operational improvements. It should also focus its activities on the collection of lessons learned and best practices in implementing operational improvements related to regional ASBUs threads and elements.

3.2   The agenda items of the ICAO 14th Air Navigation Conference is covering the technical update of the eighth edition of the Global Air Navigation Plan (GANP) which is an opportunity to share MID region views, and expectations on the upcoming guidance material on NANPs.

4.   ACTION BY THE METING

4.1   The meeting is invited to:

a)   note the information provided in this IP ;

b)   consider the proposed content of the NANP as in para 2.2 in this paper ;

c)   support Saudi Arabia in drafting WP to ICAO 14th Air Navigation Conference on NANP contents, considering the high-level contents provided in the Attachment to this paper ;

d)   note the information provided in the WP/12 that was submitted in the first meeting RANP/NANP TF/1 in Cairo, Egypt, 19 - 22 February 2024 to overview Saudi Arabia's experience in developing its NANP (SNAP - Saudi National Air Navigation Plan).

Attachment - Proposal for NANP Contents

Topic	Summary on the contents
Contents	*The table of contents of NANP*
Executive summary	*Overview on NANP contents with statement(s) from the DG or President of Civil Aviation Authority having authority to approve the NANP.*
Part 1: Description of Air Navigation system in the State a) ANS regulatory framework and Safety oversight b) Civil Aviation governance and organization c) Overview on ANS network, infrastructure, and services d) Summary on the size and complexity of the civil aviation sector e) Key challenges and areas of improvements f) On-going and planned operational improvements	*This part provides an overview on ANS organization, regulatory framework, safety oversight and a description of the ANS network, infrastructure, and services of the State. The details may be attached as an Appendix to NANP. It also provides key information on the size and complexity of the civil aviation sector, key challenges, and ANS planned short, medium, long terms operational improvements*
Part 2: ANS modernization strategy, objectives & Governance a) ANS modernization strategy, b) Digital transformation, innovation, and new entrants c) Performance based approach for ANS modernization d) NANP Objectives, and benefits e) NANP Governance, assessment, and maintenance processes	*This part defines the ANS modernization strategy to adopt digital transformation, innovation, and accommodate new entrants in the State using performance based-approach. It also describes the NANP objectives, benefits, governance, assessment, and maintenance. The processes, checklists, and forms to be used for assessment and maintenance of NANP may be attached as Appendices.*
Part 3: Alignment with ICAO GANP and regional frameworks a) Overview on ICAO GANP, GASP and GASecP, b) Regional eANP and Air Navigation Strategy c) Alignment with GANP and regional frameworks	*This part provides an overview of the applicable elements of GANP, GASP, and GASecP to the NANP. It also captures the regional ANP and Strategy applicable to the State.*
Part 4: Main ANS Work streams & Areas of focus a) Airport operations and terminal airspace, b) Network Management and integration c) Airspace management and data services d) Advanced CNS/ATM and flight operations e) High- and low-level airspace operations	*This part identifies the main ANS modernization work streams which must cover all applicable threads and elements that were identified under Part 3.*
Part 5: Deployment plans and roadmaps: For each ASBU element identified under ANS Work streams: a) Identification of the main stakeholders (Owner and supporting stakeholders) b) Summary of each ASBU element and concept of Operations, c) Cost-benefit analysis d) Technical and operational enablers e) Assessment of Regulatory framework, standards and specifications f) Performance measurements, monitoring, and reporting g) Stakeholders' engagement	*This part describes the deployment plans and roadmaps. For Each ASBU element encompasses under the ANS work streams identified under Part 4, the NANP should cover all topics and sub-topics defined. the final objective is to have a development plan with clear roadmap for the implementation.*

Topic	Summary on the contents
h) Required qualifications & Training i) Implementation roadmap	
Part 6: Appendices a) Governance structure illustration: Roles and responsibilities b) Roadmap for regulatory framework updates to support ANS modernization, c) Mapping between ASBU threads and elements and identified Work streams d) Performance KPAs and KPIs adopted and the methods for collecting data and reporting on the performance including forms. e) Matrix on required qualifications and training needs f) NANP Assessment and maintenance process and checklists.	*This part contains all information, templates, forms, and checklists defined under NANP. It also contains all complementary information.*

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